

Remarks

This response is filed within 3 months from the end of the shortened statutory period for response, which expired on October 9, 2001. The Applicant has submitted check No. 11208 in the amount of \$920.00 in payment of the following fees:

Three-month extension fee	\$920.00
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In the Office Action, the Examiner made reference to two documents:

<u>Document</u>	<u>Date</u>	<u>Inventor</u>
US 5,567,010	1996	Sparks
US 6,186,594	2001 (filed 1998)	Valiquette et al.

Explanation of Amendments

The Applicant has amended claims 1, 4, 5, 6, 11 and 14. Furthermore, the Applicant has cancelled claims 7 and 15 without prejudice. The Applicant has added a new claim 22. These amendments are explained in more detail below.

Response to Objections / Rejections

The Examiner objected to claim 1 on the basis that it was anticipated by Sparks. The Examiner did not object to claim 7 on the basis of Sparks. The Applicant has amended claim 1 to include the limitations previously set out in claim 7. In particular, the Applicant has amended the backrest of claim 1 to include a frame and a support shell mounted on the frame and a plurality of flexible independently movable vertically extending members mounted to the support shelf.

The Examiner did object to claim 7 on the basis of Valiquette. However, the Applicant's review of Valiquette indicates that the subject matter is not shown in that document.

Valiquette describes two embodiments of a flexible contour wheelchair backrest. The first embodiment is shown in Figures 1 – 5. Referring specifically to Figure 2, the backrest includes a number of malleable substantially stiff metallic stays 58 – 61 (column 6, lines 52 – 54).

These metallic stays 58 – 61 are intended to provide lumbar support to the user of the wheelchair. Although Valiquette uses the word "flexible" to describe stays 58-61, these stays are substantially stiff in use. The stays 58-61 are not flexible in use and are not capable of independent movement.

Reference is made to the description of the stays starting at column 7, line 50 of Valiquette. Valiquette describes the shape of the stays 58 to 61 as being configured by manually bending the metallic stays to conform to the shape of a particular user's back. This must be done prior to the backrest being used. In one preferable embodiment, the stays are made of aluminum and have a thickness of 1/16 of an inch. Valiquette states that the thickness of the stays can be modified to provide increased stiffness if it is needed. Accordingly, it is clear that Valiquette does not contemplate stays 58 – 61 which will conform to the shape of a user's back when the user sits in the chair, but instead that the shape of the stays will be previously bent to conform to the shape of the user's back.

Valiquette's second embodiment is shown in Figures 6-9. Referring to Figure 9, this embodiment includes a pair of stays 147 and 148, which are essentially identical to stays 58-61, for the purpose of the present analysis. Stays 147 and 148 are inserted into pockets 145 and 146 of the rear face 125 of the backrest (column 9, lines 60-62). The stays 147 and 148 are manually bent to conform to the shape of the back of a user (column 10, lines 51-67) and are preferably stiff when in use. In the remainder of this response, only stays 58-61 will be discussed, since stays 147 and 148 are structurally similar and functionally identical to stays 58-61.

The Examiner is directed to Valiquette starting at column 6, line 52 and to Figure 2. Valiquette states that the stays are inserted into pockets in the nylon fabric of the rear face 41 of the backrest body 45. Since the stays are connected by the rear face, they are not capable of independent movement.

Accordingly, the Applicant respectfully submits that Valiquette does not disclose the backrest of amended claim 1 and does not even contemplate the concept of flexible and independently moveable vertically extending members which conform to the shape of the back of the person when the person is seated on the chair.

Accordingly, the Applicant submits that claim 1 is patentable over the cited prior art.

Claim 4 has been amended to correct a clerical error. A space in the word "backrest" has been removed.

Claim 5 has been amended to state clearly that the support shell and the vertically extending members are formed integrally.

Claim 6 has been amended to make its language consistent with that of amended claim 1.

Claim 7 has been cancelled, without prejudice.

Claims 2 – 6 and 8 – 9 are all dependant on claim 1 as amended. Accordingly, the Applicant submits that these claims are also patentable for the same reasons as claim 1.

New claim 22 is dependent on amended claim 1. The addition of new claim 22 does not necessitate a further search by the Examiner and the Applicant submits that new claim 22 is patentable for the same reasons as amended claim 1.

The Examiner objected to claim 11 as being anticipated by Sparks. The Applicant has amended claim 11 to define the slats as being formed integrally with the shell of the backrest. Referring to Figure 1 of Sparks, it is clear that supports 101 and 102 are not formed integrally with the other parts of Sparks' backrest.

Furthermore, Sparks states that supports 101 and 102 are made of plastic while the support members 121 and 122 that they are attached to are made of metal (column 6, lines 56-64; column 5, lines 9-11). Accordingly, Sparks does not contemplate or suggest that his supports 101 and 102 may be formed integrally with members 121 and 122.

The Examiner also objected to claim 11 as being anticipated by Valiquette. As described above in relation to claim 1, Valiquette's stays 58-61 (Figure 2) are not flexible in use, but are actually intended to be stiff once bent into the desired shape. The stays are clearly not resilient when in use, and accordingly, Valiquette does not anticipate claim 11.

The Applicant respectfully submits that claim 11 as amended is not anticipated by Sparks.

Claim 12 and 13 are dependent on amended claim 11 and are accordingly patentable for the same reasons as amended claim 11.

The Examiner objected to claim 14 as being anticipated by Sparks and Valiquette. The Examiner stated that claim 15 was objected to as being patentable as being dependent on a rejected base claim but advised that this claim would be allowable if re-written in independent form. Accordingly, the Applicant has added the additional limitations previously set out in claim 15 into claim 14.

The Applicant submits that claim 14 as amended is patentable over the cited prior art.

Claim 15 has been cancelled, without prejudice.

Claims 16-21 are dependent on claim 14 as amended and are accordingly patentable over the cited prior art for the reasons as set out above in respect of claim 14.

Conclusion

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned **"Version With Markings to Show Changes Made."**

In view of the foregoing comments, it is respectfully submitted that the application is now in condition for allowance. If the Examiner has any further concerns regarding the language of the claims or the applicability of the prior art, the Examiner is respectfully requested to contact the undersigned at 312-661-2100.

Respectfully submitted,

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Dated: 11/9/02

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Please amend the claims as follows:

1. A backrest for attachment to a chair having a seat, the backrest comprising:
 - (a) a [support structure] frame having a top and a bottom;
 - (b) a support shell mounted on the frame; and,
 - ([b]c) a plurality of flexible, independently moveable, vertically extending members mounted to said support shell and positioned to engage at least a portion of a back of a person when the person is seated in the chair, whereby the backrest conforms to the shape of the back of the person.
4. The backrest of claim 1 wherein the flexion of the vertically extending members conforms to the shape of the back of the person as the position of the back of the person with respect to the backrest [back rest] is adjusted.
5. The backrest of claim 1 wherein the [support structure] frame comprises an outer peripheral portion [which includes the top and bottom of the support structure] and the peripheral portion surrounds a central portion in which the vertically extending members are positioned.
6. The backrest of claim 5 wherein the back rest has a front and a back and the vertically extending members engage the support shell [structure] only at the top and the bottom whereby the vertically extending members support the back of

the person without engaging any structural member positioned behind the vertically extending members.

Please cancel claim 7, without prejudice.

11. A one-piece backrest for supporting a person's back, the backrest comprising:

- (a) a shell [frame] having a top and a bottom; and
- (b) at least two slats formed integrally with the frame, said slats extending between the top and the bottom, wherein each slat is resilient so as to be responsive to a force applied to it by the person's back to produce a responsive force.

14. A backrest for attachment to a chair having a seat, the backrest comprising:

- (a) a support structure having a top and a bottom; and
- (b) a plurality of vertically extending members, said vertically [connected] extending members being laterally spaced apart for at least a portion of their height to permit independent movement of adjacent vertically extending members, wherein each of the vertically extending members supports a longitudinal section of at least the lumbar region of a person seated on the chair without engaging a supplemental support member.

Please cancel claim 15, without prejudice.

Please add the following new claim:

22. [newly added] The backrest of claim 1 wherein the support shell and the vertically extending members are formed integrally.